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SITE MANAGEMENT PLAN FIRST QUARTER UPDATE FOR FISCAL YEAR 2001 NAS CECIL FIELD FL

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TETRA TECH NUS INC

Site Management Plan
First Quarter Update
for
Fiscal Year 2001

Naval Air Station Cecil Field
Jacksonville, Florida

Southern Division
Naval Facilities Engineering Command
Contract Number N62467-94-D-0888

Contract Task Order 0066

January 2001

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SITE MANAGEMENT PLAN
FIRST QUARTER UPDATE
FOR
FISCAL YEAR 2001
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

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ACRONYMS

ABB-ES	ABB Environmental Services
AOI	Area of Interest
APR	Alternate Procedures Request
AS	Air Sparging
AST	Above-Ground Storage Tank
AVORD	Aviation Ordnance
BCT	BRAC Cleanup Team
BRA	Baseline Risk Assessment
BRAC	Base Realignment and Closure
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
CA	Contamination Assessment
CARA	CAR Addendum
CAR	Contamination Assessment Report
COC	Contaminant of Concern
CSR	Confirmation Sampling Report
DPT	Direct Push Technology
FDEP	Florida Department of Environmental Protection
FFA	Federal Facilities Agreement
FS	Feasibility Study
FY	Fiscal Year
IRA	Interim Remedial Action
IR	Installation Restoration
NAS	Naval Air Station
NFA	No Further Action
NFF	North Fuel Farm
OU	Operable Unit
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyls
PRG	Preliminary Remediation Goal
PSC	Potential Source of Contamination
PP	Proposed Plan
QPR	Quarterly Progress Report
RA	Remedial Action
RAB	Restoration Advisory Board
RAC	Remedial Action Contractor

RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
ROD	Record of Decision
SAO	Sampling and Analysis Outline
SAR	Sampling and Analysis Report (BRAC program) or Site Assessment Report (petroleum program)
SMP	Site Management Plan
SVE	Soil Vapor Extraction
TRPH	Total Recoverable Petroleum Hydrocarbons
UST	Underground Storage Tank
U.S. COE	U.S. Army Corps of Engineers

1.0 INTRODUCTION

1.1 BACKGROUND

The U.S. Navy, the U.S. Environmental Protection Agency, and the state of Florida, via the Florida Department of Environmental Protection (FDEP), signed the Federal Facilities Agreement (FFA) for Naval Air Station (NAS) Cecil Field, Jacksonville, Florida in October 1990. The purpose of the FFA was to provide the legal mechanism for the Navy to investigate and undertake appropriate remedial action (RA) for past hazardous waste releases at NAS Cecil Field. As part of the FFA, the Navy prepares Quarterly Progress Reports (QPRs) for submittal to the other FFA parties.

1.2 SCOPE

In accordance with the FFA, Part XII, the QPRs identify and briefly describe actions the Navy has taken to implement FFA requirements in the previous quarter and those actions scheduled for the upcoming quarter. The activity narrative includes a statement on the manner and extent to which the Navy is meeting the schedules that are established by the FFA through the Site Management Plan (SMP) and work plans. In addition to the activity descriptions, problems that caused delays or anticipated problems that might cause delays are identified and the actions the Navy plans to take to manage the delays are discussed.

1.3 SCHEDULE

The Navy submits the QPR within 30 days from the end of the previous quarter.

2.0 FEDERAL FACILITY AGREEMENT ACTIVITIES

2.1 SITE MANAGEMENT PLAN

The Navy provided FFA parties with a Fiscal Year (FY) 2001 SMP on January 17, 2001. The SMP included schedules to accomplish Installation Restoration (IR), Petroleum [underground storage tank (UST) and above-ground storage tank (AST)], and Base Realignment and Closure (BRAC) program activities at NAS Cecil Field. SMP revisions are recommended for approval as needed. Reasons for revisions may include new information obtained during field investigations and remediation initiatives under consideration. This first quarter report for FY 2001 presents the revisions to the SMP schedule.

2.2 ADMINISTRATION

The Navy has continued administering the IR, the Petroleum, and the BRAC programs and implementing field activities in accordance with previously submitted and approved planning documents.

2.3 SCHEDULE ADHERENCE

The Navy has primary responsibility for developing and implementing the SMP and for administration and schedule adherence of the NAS Cecil Field remedial investigation (RI) and feasibility study (FS) program through execution of the Department of Defense IR Program. The following information was provided to the NAS Cecil Field partnering team and the regulatory agencies concerning schedule adherence during the first quarter of FY 2001 (October 1, 2000 to December 31, 2000).

Installation Restoration Program

- The schedule for Fiscal Year 2001 was updated to reflect the anticipated submittal dates of the Operating Properly and Successfully Reports, Interim Remedial Action Reports (IRA) for Sites 3 and 16, Technical Memoranda for some of the Potential Source of Contamination (PSC) sites, and the RI and FS reports for Sites 21, 25, and 45. No changes in the schedule were identified.

Petroleum Program

- The excavation and disposal of soil at the North Fuel Farm (NFF) will be completed by mid-February 2001.

- Groundwater sampling at the NFF has been discontinued until the source removal is completed.

- Groundwater sampling at the Truck Stand has been discontinued until the source removal is completed

- A Remedial Action Plan is not needed for Tank G82.

- Groundwater sampling at Tank 199 was postponed from October 2000 to January 2001 because the sampling frequency was changed to annual.

- Additional assessment is required for Tanks 271-D, -R, -UL, and –SUL and 312-OW.

- Sampling at Tanks 367, 404, and 502 has been postponed until additional monitoring wells are installed. Sampling at Tank 428 has been postponed until replacement monitoring wells are installed.

BRAC Program

- Investigations at Building 610 and Facility 824A will continue into the second quarter of Fiscal Year 2001.

- Submittal of the Site Assessment Report (SAR) for the Old Golf Course is anticipated to occur in late March 2001.

2.4 NEW INITIATIVES

The Navy is continuing with planning efforts and initiation of new processes designed to improve the execution and efficiency of the program. These items include the following:

- Onboard review of major deliverables.

- Identification and implementation of site screening methods designed to accelerate the investigative process.

- Evaluation of remedial alternatives to incorporate data needs into the initial RI process.

- Coordination of assessment and cleanup activities with the Remedial Action Contractor (RAC).

- Combination of the PSC technical memoranda and the decision documents into one report, Technical Memorandum for No Further Action (NFA).

- Adoption of NAS Cecil Field background screening concentrations for inorganics in all media.

- Completion of preliminary risk evaluations to identify problem sites.
- Implementation of interim actions to eliminate threats to human health.
- Use of immunoassay kits for contamination delineation followed by confirmatory sampling.

3.0 ACTIVITIES PERFORMED THIS QUARTER

3.1 COMMUNITY RELATIONS

The Cecil Field Restoration Advisory Board (RAB) met on October 24, 2000. The meeting provided updates on the IR, Petroleum, and BRAC site status. The announcements at the RAB included the fact that a member of the RAB has been invited to the Department of Defense Cleanup Stakeholders Forum in November and introduction of a new FDEP representative who has joined the RAB. The following topics were discussed:

- Update on the status of the NFF remediation activities.
- Update on the status of the Site 3 and Site 16 air sparging (AS) remediation and groundwater monitoring activities.
- Presentation of the results of the Five-Year Review.
- Update on the status of the Findings of Suitability to Transfer.
- Update on the status of determining the remediation goals at Site 15.
- Update on the status of each of the sites at NAS Cecil Field.

3.2 FIELD WORK

The following field activities were conducted during the first quarter of FY 2001. Table 3-1 presents site descriptions of the current investigative status for IR sites. Similarly, site descriptions of petroleum sites are presented in Table 3-2.

<u>IR Program</u>

- Site 3 RA – Restarted the AS system.
- Site 3 natural attenuation groundwater sampling – 1st quarter event (Year 3).
- Site 7 groundwater sampling – 1st quarter event (Year 4).
- Site 16 RA – Restarted the AS/soil vapor extraction (SVE) system.
- Site 16 natural attenuation groundwater sampling – 2nd quarter event (Year 3).
- Site 36 and 37 - Began installation of monitoring wells for groundwater monitoring.
- PSCs 40, 51, and 52 sampling continues. Investigations at the other PSCs were completed to delineate the extent of contamination. These PSCs will undergo removal actions.

Petroleum Program

- Continued excavation of soil and demolition of tanks in the NFF.
- Installed remediation systems at Buildings 9 and 46.
- Continued investigations that included sampling activities at Buildings 312, 404, 428, and 815 and Tanks G82, and 271-D, -R, -UL, and –SUL.
- Continued quarterly groundwater sampling at the Jet Engine Test Cell.

BRAC Program

- Continued investigations that included sampling activities at the following gray sites: 290, 293, 605, 610, 635, the Former Fuel Depot, and the North-South Apron Plume.

3.3 DELIVERABLES

The following deliverables were submitted during the first quarter of FY 2001.

IR Program

- Sites 1 and 2 final Long-Term Monitoring Report – (Year 3).
- Site 3 Annual Natural Attenuation Groundwater Monitoring Report – (Year 2).
- Site 3 First Quarter Natural Attenuation Groundwater Monitoring Report – (Year 3).
- Site 5 Natural Attenuation Groundwater Monitoring Report – 1st Semi-Annual (Year 3).
- Site 7 draft and final Annual Groundwater Monitoring Report – (Year 3).
- Site 7 Semi-annual Groundwater Monitoring Report – (Year 4).
- Site 8 Natural Attenuation Groundwater Monitoring Report – 1st Semi-Annual (Year 3).
- Site 11 Annual Groundwater Monitoring Report – (Year 2).
- Site 11 draft Operating Properly and Successfully Demonstration Report.
- Site 16 Annual Natural Attenuation Groundwater Monitoring Report – (Year 2).
- Site 16 Natural Attenuation Groundwater Monitoring Report – 2nd Quarter (Year 3).
- Sites 36 and 37 draft Record of Decision (ROD).
- Site 37 Dig and Haul Package.
- Site 36 and 37 draft Long-Term Monitoring Plan and final Storm Sewer Sampling Plan.
- Draft SMP for Fiscal Year 2001.
- Sampling and Analysis Work Plan for PSC 51.
- Technical Memoranda for PSCs 40 (draft), 47 (draft), 50 (draft), and 53 (draft and final).

Petroleum Program

- Tank G82 Contaminated Soil Removal letter.
- Site 37 Dig and Haul Package.
- Compact disc of project files for several tank sites.
- Jet Engine Test Cell Quarterly Monitoring Report.
- Day Tank 1 Semi-Annual Groundwater Monitoring Report.

BRAC Program

- Dig and Haul Packages for the former railroad sites at Buildings 98 and 535.

3.4 MEETINGS

The following meetings were held during the first quarter of FY 2001:

• Partnering Meeting	October 24 to 26 and December 5 to 7, 2000
• RAB Meeting, NAS Cecil Field	October 24, 2000
• Partnering Team Teleconference	November 13 and December 20, 2000
• Petroleum Subcommittee Meeting	December 5, 2000

TABLE 3-1

SITE DESCRIPTION CHART
INSTALLATION RESTORATION PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site No.	Operable Unit	Site Name/Size	Period of Operation	Waste Type	Sources	Description of Activity
1	OU 1	Old Landfill (9 acres)	1950s-1965	Solid waste, oils, fuels, paints, paint stripper, solvents, municipal solid waste	Municipal solid waste, industrial operations	Trench and fill landfill for commercial and residential wastes (solid and liquid).
	Current Investigative Status: The Record of Decision (ROD) was submitted in September 26, 1995. The selected remedial alternative, site closure, included landfill gas, radiological and unexploded ordnance surveys, surface debris removal, groundwater monitoring, post-closure care, and a 5-year review. Final design was submitted in April 1996. Bechtel and the U.S. Navy conducted an unexploded ordnance survey in 1997 and Bechtel completed a radiological survey in 1998. TtNUS initiated monitoring activities in May 1997. The 1st, 2nd, 3rd, and 4th quarter sampling events were completed and reports presenting the analytical results were submitted for each sampling event. Sampling has been reduced to an annual event. The April 1999 annual sampling event was conducted and the report summarizing the results was completed. Monitoring wells CEF-BK-4S and CEF-1-5S were resampled in December 1999. The April 2000 annual sampling event was conducted and the report recommended continuing the monitoring program. The report was submitted in November 2000. The next full sampling event will be completed in April 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2001.					
2	OU 1	Recent Landfill (5 acres)	1965-1975	Solid waste, oils, fuels, paints, paint stripper, solvents	Industrial operations and shops	Trench and fill landfill for commercial and residential wastes (solid and liquid).
	Current Investigative Status: The ROD was submitted in September 1995. The selected remedial alternative included site closure and biomonitoring in the wetland area. Final design was submitted in April 1996. Bechtel and the U.S. Navy conducted an unexploded ordnance survey in 1997 and Bechtel completed a radiological survey in 1998. TtNUS initiated monitoring activities in May 1997. The 1st, 2nd, 3rd, and 4th quarter sampling events have been completed and reports presenting the analytical results were submitted for each sampling event. Sampling has been reduced to an annual event. The April 1999 annual sampling event was conducted and the report summarizing the results was completed. Monitoring wells CEF-BK-4S and CEF-1-5S were resampled in December 1999. The April 2000 annual sampling event was conducted and the report recommended continuing the monitoring program. The report was submitted in November 2000. The next full sampling event will be completed in April 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2001.					
3	OU 8	Oil/Sludge Disposal Pit (50-100 ft in diameter and 3-5 ft deep)	1950s-1975	Waste fuels, oils, paints, paint strippers, solvents	Fuel farm, AIMD, squadrons, public works shops	At least four shallow pits were used to dispose of liquid wastes and sludge. Groundwater was the only medium identified in the baseline risk assessment (BRA) as having an unacceptable human health risk. No ecological risk was identified for any medium.
	Current Investigative Status: The ROD was signed in September 1998. The final groundwater remedial design was submitted in October 1998 and identified air sparging(AS) of the source, natural attenuation monitoring of the plume, institutional controls to prevent use of groundwater, and 5-year reviews. The baseline sampling event for natural attenuation was conducted in December 1998. Quarterly groundwater monitoring is ongoing. The annual summary report for the Year 1 Quarterly Monitoring Program was completed in January 2000. The Year 1 annual report recommended quarterly sampling in the source area and the wells near Rowell Creek and semi-annual sampling of the wells in the plume. The installation of the air sparging system was completed in the third quarter of FY 1999, the system began operation in late May 1999, and the system was shut down in May 2000. The Year 2 annual report recommended that the air sparging system remain off and the groundwater monitoring program was optimized (reduced analyses and number of monitoring wells). The November 2000 groundwater sampling event (source area only) showed a rebound of the contaminants of concern (COCs) in the source area. The BCT decided to restart the AS system. The AS system was turned on December 22, 2000. The next groundwater sampling event is scheduled for January 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2002.					

TABLE 3-1

SITE DESCRIPTION CHART
INSTALLATION RESTORATION PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site No.	Operable Unit	Site Name/Size	Period of Operation	Waste Type	Sources	Description of Activity
4	--	Grease Pits (9 acres)	1950s-1983	Waste oils, mess greases	Installation dining facilities and facility oil/water separators	Multiple shallow pits were excavated to dispose of liquid wastes (grease from dining facilities and waste oils from oil/water separators) and then covered with fill.
	Current Investigative Status: Field investigation work plan was submitted in March 1995. Field screening activities (includes surface and subsurface soil sampling and monitoring well installation) were completed in June 1997. Groundwater sampling was completed in August 1997. The final Technical Memorandum for No Further Action (NFA) was submitted in September 1998.					
5	OU 2	Oil Disposal Area Northwest (100 ft in diameter)	1950s	Oil, fuel	Fuel farms	Shallow, unlined pit where liquid wastes were disposed (petroleum products present)
	Interim Action: Interim ROD was signed in September 1994. Interim remedial action (IRA) was initiated in March 1995 for source removal. IRA included removal and disposal of free petroleum product and removal and treatment of contaminated soil using bioremediation. Per partnering team recommendations, the IRA (bioremediation) activities were discontinued in June 1996. Current Investigative Status: RA reports were submitted in May 1995. Final ROD was submitted in September 1995. The remedial alternative included excavation and treatment of sediment in drainage ditch, on-site treatment of contaminated groundwater, and a restriction on all use of groundwater from the surficial aquifer. Due to discontinuation of the interim action, the ROD was amended. The Amended ROD was issued in January 2000. A Technical Memorandum letter report about the free-product investigation was submitted in September 2000. The remedial actions for soil and sediment were initiated in April 1998. For this effort, approximately 2,100 yd^3 of soil were excavated from Site 5 and disposed off site. Approximately 330 yd^3 of sediment was excavated from the adjacent drainage ditch and backfilled in the excavated soil area. Previously treated Site 5 soil was used to backfill the remainder of the soil excavation. This effort was completed in July 1998. The final groundwater remedial design for AS was submitted in May 1998. Two groundwater sampling events were conducted to assess the potential of natural attenuation as a remedial alternative. Based on data collected during these sampling events, natural attenuation appears to be a viable remedial alternative at Site 5. The annual summary report for the Year 1 Monitoring Program was completed in September 1999. Recommendations included reducing monitoring to semi-annual events. The Year 2 annual sampling event was conducted in February 2000 and recommended continuation of the semiannual sampling. The Year 3 first semi-annual groundwater monitoring event was completed in August 2000. The Year 3 annual groundwater sampling event will be conducted in January 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2001.					
6	--	Lake Fretwell Rubble Disposal Area (3.5 acres)	1950s-1984	Inert rubble	Concrete/asphalt from demolition of runway, construction debris, lumber, scrap metal, cut foliage	Rubble was disposed along banks of a low-lying marsh area by public works; some of the rubble has been overlain with soil and sod; additional rubble is uncovered.
	Current Investigative Status: Field Investigation Plan was submitted in March 1995. Field screening activities (geophysical surveys, monitoring well installation, surface and subsurface soil sampling, surface water and sediment sampling) were completed in June 1997. Groundwater sampling was completed in August 1997. The draft Technical Memorandum presenting investigation findings was submitted in May 1998. However, the BCT decided that additional sampling was required. Three additional soil sampling events were conducted between April and July 1999 to delineate soil contaminated with arsenic, total recoverable petroleum hydrocarbons (TRPH), and benzo(a)pyrene. A dig and haul package was completed in August 1999. The Navy excavated and disposed of the contaminated soil in August 1999. The final Technical Memorandum for NFA was issued in July 2000.					

TABLE 3-1

SITE DESCRIPTION CHART
INSTALLATION RESTORATION PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site No.	Operable Unit	Site Name/Size	Period of Operation	Waste Type	Sources	Description of Activity
7	OU 3	Old Fire Fighting Training Area (1/3 acre)	1950s-1975	Waste fuels, oil, solvents, paint, paint strippers	Fuel farm, AIMD, squadrons, public works shops	Burnable liquid wastes were poured onto metal objects (jets) in shallow, unlined pits and ignited for fire fighting training
	Current Investigative Status: The ROD was submitted in March 1998. A draft soil and groundwater design package was submitted in May 1998. In September 1998, surface soil sampling in support of the RA was conducted to further delineate TRPH, polynuclear aromatic hydrocarbons (PAH), and inorganic contamination. The RA for soil was conducted in December 1998 and the Construction Completion Report indicated NFA for the soil. The groundwater portion of the design package was implemented in August 1998 and consists of annual groundwater monitoring. Annual groundwater monitoring reports were issued in October 1998 and October 1999. Results from the groundwater sampling conducted in July 2000 indicated the concentration of benzene had decreased below the detection limit and Florida cleanup criteria. The annual report (Year 3) recommended that sampling occur in November 2000. The November 2000 sampling event showed a rebound in the benzene concentration in one well. The BCT decided to sample the one well (8S) quarterly. The next scheduled groundwater sampling event will be in January 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2001.					
8	OU 3	Boresite Range/ Hazardous Waste Storage Area/Fire Fighting Training (6 acres)	1975-1984	Waste fuels, oil, solvents, paint, paint strippers, lead	Fuel farm, AIMD, squadrons, public works shops	Burnable liquid wastes were poured onto metal objects (jets) in shallow, unlined pits and ignited for fire fighting training. Boresite range was used for machine gun and small arms practice. 55-gallon drums of waste were stored at the site and used as targets for practice.
	Current Investigative Status: The ROD was submitted in March 1998. The groundwater remedial design work plan was submitted in June 1998. The Baseline Sampling Event for natural attenuation was conducted in August 1998. The annual summary report for the Year 1 Monitoring Program was completed in July 1999. Recommendations included reducing monitoring to semi-annual events. The annual sampling event was conducted in February 2000 and recommended continuation of the semiannual sampling. The Year 3 semi-annual groundwater sampling event was completed in July 2000. A fifth monitoring well was added to the sampling program. The Year 3 annual groundwater sampling event will be conducted in January 2001. In August 1998, surface soil sampling was conducted to further delineate TRPH contamination. The draft soil remedial design, submitted in November 1998, identified excavation of the three pits to the groundwater table, removal of soil exceeding residential criteria to depth of 1 foot, and collection of confirmation samples. Additional sampling was conducted in April 1999 to identify a site-specific protection of groundwater value for TRPH in soil. A dig and haul package was submitted, and soil excavation and disposal related to the TRPH contamination was completed in August 1999. The Source Removal Report was issued in April 2000 and indicated NFA for the soil. An Operating Properly and Successfully Demonstration report is being prepared for FY 2001.					
9	--	Recent Grease Pits (0.5 acre)	1983-1984	Grease mixed with water	Installation messes	Three shallow pits were used to dispose of kitchen grease; each pit was used until full and then a new pit was excavated
	Current Investigative Status: Field investigation work plan was submitted in March 1995. Field screening activities, except for groundwater sampling, were completed in June 1997 (including geophysical survey, hydrological assessment, monitoring well installation, surface and subsurface soil, surface water and sediment sampling). Groundwater sampling was completed in July 1997. A draft Technical Memorandum presenting investigation results and conclusions was submitted in December 1997. The final technical memorandum for NFA was submitted in July 1998.					

TABLE 3-1

SITE DESCRIPTION CHART
INSTALLATION RESTORATION PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site No.	Operable Unit	Site Name/Size	Period of Operation	Waste Type	Sources	Description of Activity
10	OU 4	Rubble Disposal Area (6.5 acres)	1950s-1960s	Inert Rubble	Building demolition debris, runway debris	Surface disposal area with debris (demolition, roadway, metal); information is limited
	Current Investigative Status: The final Remedial Investigation (RI) report was submitted in November 1996. The RI report presented a NFA recommendation with a proposal to prepare an NFA ROD. The Proposed Plan (PP) was submitted in July 1997. Final ROD was submitted in August 1997. One detection of arsenic was observed above its background criterion, and in December 1998, soil sampling was conducted to delineate this area. A dig and haul package was submitted, and soil excavation and disposal related to arsenic contamination were completed in August 1999. An Explanation of Significant Difference was prepared in June 1999. Soil excavation and disposal was completed in September 1999. The Remedial Action Report was issued in April 2000 and indicated NFA for the soil.					
11	OU 6	Golf Course Pesticide Disposal Area	1970s-1978	Pesticide, fungicide, and herbicide containers, vehicles, metal debris	Golf course maintenance area	Reportedly, between 200 and 400 empty 5-gallon cans that had contained pesticides were buried at the site; a limited number of full containers of pesticides were buried in 1978.
	Interim Actions: Final Interim ROD was submitted to the regulatory agencies in August 1994. The IRA was completed in January 1996. The pit was lined with plastic and a fence was placed around the open pit. The remedial action completion report was submitted on October 18, 1996. Revisions to the Remedial Action Report were submitted on May 16, 1997. Current Investigative Status: The ROD was finalized and signed in September 1998. The draft design for soil treatment was submitted in August 1998. A soil removal in accordance with the final remedial action occurred in December 1998. During the removal action, pesticide containers were discovered and disposed accordingly. A geophysical investigation was conducted in February 1999 to assess whether additional buried containers remain on site. Based on the anomalies found during this investigation, test pitting was conducted in the second quarter of FY 2000 (January to March 2000). A Soil Remedial Action Report Addendum was issued in August 2000 and indicated NFA for the soil. The remedial design for groundwater was submitted in November 1998. The baseline groundwater sampling event was conducted in December 1998. The annual summary report for the Year 1 Quarterly Monitoring Program was completed in November 1999. Recommendations included reducing monitoring to semi-annual events. The Year 2 annual sampling was conducted in August 2000. The next sampling event is scheduled for January 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2001.					
12	--	Public Works Rubble Disposal Area (0.5 acre)	1970s-1984	Inert rubble, lumber, concrete, wire, cable, scrap metal, drums	Public works	Majority of rubble has been buried approximately 3 feet below land surface, some rubble is above ground.
	Current Investigative Status: Field investigation work plan was submitted March 1995. Field screening activities (geophysical survey, hydrological assessment, monitoring well installation, surface and subsurface soil sampling, groundwater sampling and surface water and sediment sampling) were completed in August 1997. The Technical Memorandum for NFA was submitted in September 1998 and regulatory concurrence was received in October 1998.					
13	--	Day Tank 1-Fuel Spill (1.5 acres)	1981	JP-5 fuel	Day tank	Location of fuel spill in 1981; approximately 500,000 gallons of JP-5 fuel were spilled; approximately 250,000 gallons were recovered.
	Current Investigative Status: Transferred to the petroleum program.					

TABLE 3-1

SITE DESCRIPTION CHART
INSTALLATION RESTORATION PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site No.	Operable Unit	Site Name/Size	Period of Operation	Waste Type	Sources	Description of Activity
14	OU 5	Blue 5 Ordnance Disposal Area (4.5 acres)	1967-1977	Fuses, 100-pound bombs, large munitions, lulu fuses, other explosive materials	Installation ordnance disposal operations	Ordnance disposal by open detonation or burning
	Current Investigative Status: The final RI report was submitted in October 1997. The final Feasibility Study (FS) report and the PP were submitted in March 1998. The ROD was submitted in July 1998. The ROD selected the NFA remedy.					
15	OU 5	Blue 10 Ordnance Disposal Area (10 acres)	1960s-1977	Small arms, parachute/distress flares, Mark IV signal cartridges, rocket igniters, CADS, 5- and 2.75-inch rockets	Installation ordnance disposal operations	Ordnance disposal by combustion in a chamber with ashes being spread over the site.
	Current Investigative Status: The final FS was submitted in March 1998. An ecological study was conducted in September 1998. Additional sampling was conducted in FY 1999 to fill in data gaps for lead and PAH contamination. A revised FS will be prepared after the remedial goals are identified. A PP and a ROD will be completed after the FS is finalized.					
16	OU 7	AIMD Seepage Pit (40x3x10 ft)	1960-1980	Solvents, heavy metals, acids, blasting grit, paint residue, photo wastes	Building 313, jet engine maintenance shop	Seepage pit used to drain wastewater (containing solvents, paint, grease, metals) generated from Building 313 operations into area soils; RCRA holding tank for wastewater is also located at Site 16; glass bead separator and associated piping also present.
	Interim Remedial Action: Focused FS and remedial design for the removal of holding tank and impacted soils were issued. Final responsiveness summary and Interim ROD were submitted in March 1994. The removal and closure of the NDI Holding Tank was completed in June 1994. Final NDI Holding Tank Closure Certification and Report was submitted in September 1994. Current Investigative Status: The ROD was submitted in August 1996. The remedial design for Site 16 was revised and consisted of remedial actions proposed for the source area and storm sewer system as identified below. An Amended PP and Amended ROD were submitted in the second quarter of FY 1999. Storm Sewer System: A pilot-scale Treatability Study work plan for the storm sewer system was submitted in April 1998. The pilot study for the Storm Sewer System was completed in April/May 1998 and a pilot-scale treatability study report was submitted in June 1998. The draft Storm Sewer Remedial Design was submitted in August 1998. A storm sewer investigation was conducted in August 1998 to evaluate the remaining portions of the Storm Sewer System near Site 16. The storm sewer system was repaired in June 1999. Source Area: A decision was made based on new information to revise the remedial action to AS of the source and natural attenuation of the plume in the Amended ROD. The pilot-scale air sparging/soil vapor extraction (AS/SVE) work plan was finalized and implemented in September 1998. The baseline groundwater sampling event was conducted in September 1998 and quarterly groundwater monitoring is ongoing. The annual summary report for the Year 1 Monitoring Program was completed in September 1999. The annual report recommended quarterly sampling in the source area and semi-annual sampling of the wells in the plume. The AS/SVE system installation was completed in June 1999, the operation of the system began in late June 1999, and the system was shut down in May 2000. The Year 2 annual sampling event was conducted in April 2000. The Year 2 annual report recommended that the groundwater monitoring program was optimized (reduced analyses and number of monitoring wells). The November 2000 quarterly sampling event showed a rebound of the COCs in the source area. The BCT decided to restart the AS/SVE system. The AS/SVE system was restarted on December 22, 2000. The next scheduled groundwater sampling event is in January 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2002.					

TABLE 3-1

SITE DESCRIPTION CHART
INSTALLATION RESTORATION PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site No.	Operable Unit	Site Name/Size	Period of Operation	Waste Type	Sources	Description of Activity
17	OU 2	Oil/Sludge Disposal Pit Southwest (2 acres)	Late 1960s - early 1970s	Waste fuels/oils	Fuel farm	Unlined shallow disposal pit
	Interim Remedial Action: Interim ROD was signed in September 1994. An IRA was initiated in February 1995 for source removal of contaminated soil, including removal and on-site treatment. A remedial action completion report was submitted in September 1996. Current Investigative Status: The ROD was submitted September 1995. The remedial alternative is intrinsic bioremediation with an aggressive monitoring program. The final remedial design work plan was submitted in January 1997. Completed the first year (4 quarters) of natural attenuation monitoring in June 1998. An annual report was submitted in June 1998 recommending semi-annual monitoring. Semi-annual monitoring is ongoing and the Year 2 annual report was issued in June 1999. The recommendations from the Year 2 annual report included discontinuing the analysis of several COCs and several natural attenuation parameters. The Year 3 annual sampling event was conducted in February 2000 and recommended decreasing the number of wells to be sampled. The next groundwater sampling event will be completed in January 2001. An Operating Properly and Successfully Demonstration report is being prepared for FY 2001.					
18	--	Ammunition Disposal Area (0.1 acre)	1940s - 1950	Ammunition crates, miscellaneous ordnance	Magazine area	Waste material from a nearby magazine area was trucked in and dumped over the site during the 1940s until 1950. Reportedly, all munitions were removed.
	Current Investigative Status: Field investigation work plan was submitted in March 1995**.** Field screening activities (monitoring well installation, surface and subsurface soil, surface water, and sediment sampling) were completed in August 1997. The draft Technical Memorandum for NFA was submitted in March 1998. The final Technical Memorandum for NFA was submitted in October 1998.					
19	--	Rowell Creek Rubble Disposal Area (3 acres)	Section until 1991	Concrete, construction debris, asphalt, wood debris, trash	Construction and operations	Limited information on disposal practices
	Current Investigative Status: Field investigation work plan was submitted in March 1995. Field screening activities (records and document search, geophysical surveys, monitoring well installation, surface and subsurface soil, surface water and sediment sampling) were completed in August 1997. The draft Technical Memorandum for NFA was submitted in January 1998. The BCT recommended that the report be finalized after completion of the test pitting activities at the site. A letter report identifying test pit locations was submitted in May 1998. The Technical Memorandum for NFA was submitted in November 1998.					
36	OU 9	Control Tower TCE Plume		Chlorinated solvent, benzene, toluene, ethylbenzene, and xylene (BTEX) plume.	Groundwater plume located south of Building 82, the control tower.	The plume was discovered during the Day Tank 2 groundwater plume investigation. The plume's major contaminants are trichloroethene and BTEX
	Current Investigative Status: A RI for Site 36 (performed in conjunction with Site 37) was initiated in November 1998 and concluded in January 1999. The draft RI and FS reports were issued in the third quarter of FY 1999. The final RI Report was completed in August 1999. The remediation of Day Tank 2 groundwater contamination is included in the Site 36 groundwater remediation. The FS and PP were issued in September 2000. The ROD is currently being finalized and the AS system is being designed. Also, a long-term groundwater monitoring and a storm sewer sampling plan has been submitted. These sampling activities are scheduled to begin in late January 2001.					

TABLE 3-1

SITE DESCRIPTION CHART
INSTALLATION RESTORATION PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site No.	Operable Unit	Site Name/Size	Period of Operation	Waste Type	Sources	Description of Activity
37	OU 9	Hangars 13 and 14 DCE Plume		Chlorinated solvent and BTEX plume	Groundwater plume located south of Hangars 13 and 14	The plume was discovered as part of the flightline groundwater investigation. Its major contaminants are dichloroethene and BTEX
	Current Investigative Status: A RI for Site 37 (performed in conjunction with Site 36) was initiated in November 1998 and concluded in January 1999. The draft RI and FS reports were issued in the third quarter of FY 1999. The final RI Report was completed in August 1999. The FS and PP were issued in September 2000. The ROD is currently being finalized and the AS system is being designed. Also, a long-term groundwater monitoring and a storm sewer sampling plan has been submitted. These sampling activities are scheduled to begin in late January 2001. Excavation of contaminated soil will occur in the second quarter of FY 2001.					
21	OU 10	Golf Course Pesticide Mixing Area	1950s to present	Pesticides, TRPH, and arsenic	Golf course maintenance area	Site activities included the storage and maintenance of golf course maintenance equipment, cleaning and rinsing of chemical-dispensing equipment, and preparation of chemical solutions. Empty containers at one time were disposed in a pile on the northwest side of the site. Rinsing took place at one of two places: on the east side of Building 238, and on a concrete pad on the north side of the site. At both locations, rinse water discharged into the ditch along the east side of the site.
	Current Investigative Status: Initial investigation began in 1991. Since 1998, field investigations have been conducted to delineate soil and groundwater contamination. Soil contamination has been delineated and a draft Action Memorandum for soil removal was issued in September 2000. A soil remedial action is scheduled for the second quarter of FY 2001. The groundwater contamination will be addressed in a RI. The draft RI and FS are being prepared and are scheduled to be submitted for review in the second quarter of FY 2001.					
25	OU 10	Former Transformer Storage Yard	1953 to 1999	Pesticides, PCBs, and benzo(a)pyrene	Storage of pesticides and the storage of old transformers	Limited information on practices. Site activities included the storage of pesticides and old transformers, operation of the wash rack, and service of equipment.
	Current Investigative Status: Initial investigation began in 1997. Since 1998, field investigations have been conducted to delineate soil and groundwater contamination. The soil contamination has been delineated and a draft Action Memorandum for soil removal was issued in September 2000. A soil remedial action is scheduled for the second quarter of 2001. The groundwater contamination will be addressed in a RI. The draft RI and FS are being prepared and are scheduled to be submitted for review in the second quarter of FY 2001.					
45	OU 11	Facility 11, Steam Generating Plant	1941 to 1999	Benzo(a)pyrene, arsenic, and vanadium	Activities related to steam generation	Limited information on practices at the site. Activities are related to steam generation for the base.
	Current Investigative Status: Initial investigation began in 1995. Since 1998, field investigations have been conducted to delineate soil and groundwater contamination. The soil contamination has been delineated and a draft Action Memorandum for soil removal was issued in September 2000. A soil remedial action was conducted in August 2000. The groundwater contamination (metals) will be addressed in a RI. The draft RI and FS are being prepared and are scheduled to be submitted for review in the second quarter of 2001.					
PSC 51	--	Golf Course	1950s to present	Pesticides and metals	Golf course	Limited information on practices. Site activities are an active golf course.
	Current Investigative Status: Initial investigation began in April 1999. Field investigations are being conducted to delineate soil contamination. The groundwater, surface water, and sediment in the streams and ponds are being investigated.					

TABLE 3-2

SITE DESCRIPTION CHART
PETROLEUM PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site Name	Site Location	Waste Type	Sources	Description of Activity
Jet Engine Test Cell	Adjacent to building 339	JP-5 Jet Fuel	Two 20,000-gallon asphalt-coated, steel tanks with corrosion-resistant metal piping with cathodic protection installed in 1953 (Tanks 339-TC1 and 339-TC2). One 5,000-gallon steel AST (339-TC3) (removed in 1995).	Past releases have occurred due to tank overfilling. In October 1989, efforts to leak test Tanks TC1 and TC2 failed when inadequate seals were discovered between the manway covers and tank walls.
Current Investigative Status: Preliminary contamination assessment (CA) was initiated in December 1990 by ABB-ES. U.S. COE conducted a soil investigation in January 1991. The contamination assessment was completed in 1993 and a Contamination Assessment Report (CAR) Addendum (CARA) was submitted in March 1994. A CARA II was submitted in November 1994. Subsequently, an Alternate Procedures Request (APR) for free-product recovery was submitted on August 4, 1995. The remedial action plan submitted on November 22, 1996 was approved by FDEP in February 1997. Monitoring wells and piezometers within the soil excavation area were abandoned in June 1997. A letter report identifying a variation in soil treatment from thermal treatment to biopiles was submitted in July 1997. IRA for soil excavation was completed in September 1997. Soil removal activities took place during the first quarter of FY 1999. Quarterly natural attenuation sampling is currently in progress. Additional plumes at the site are being investigated. Additional soil will be excavated in the second quarter of FY 2001. Other Information: Part of Building 339 was demolished and rebuilt in June 1991. About 137.6 tons of soil were sent to Anderson Columbia for incineration. A 200-gallon spill occurred adjacent to Building 339 in July 1995. Soil was excavated and placed in 55-gallon drums.				
Sal Taylor Creek Containment Areas (Dam Sites)	Along Sal Taylor Creek	JP-5 Jet Fuel	JP-5 fuel spill from the North Fuel Farm (NFF) Tank 76E that occurred on February 10, 1991.	The seven dam sites are located along Sal Taylor Creek and emergency response actions were conducted at these sites after the February 10, 1991 spill. Heavy equipment and vacuum trucks were used to recover the fuel from Sal Taylor Creek.
Current Investigative Status: This site covers a total of seven areas and includes the Aviation Ordnance (AVORD) Dam Site, the North Containment Pond Site, the AVORD Perimeter Road Site, the Gate 10 Dam Site, the Alpha Dam Site, the Possum Dam Site, and the Gate 14 Dam Site. A CA was conducted in 1991 and 1994. The field investigation included soil borings, surface water and sediment sampling, and monitoring well installation. A CAR was submitted in July 1994. Based on FDEP comments, further investigations were conducted in 1995. The investigations included toxicity assessment and surface water and sediment sampling. A CARA was submitted in March 1996 and approved by FDEP in May 1996. Per BCT recommendations, sediment samples were collected for toxicity testing in December 1996. Samples were collected from the dam sites where biomonitoring or remediation was recommended in the CARA. Toxicity testing results were submitted in February 1997. A CAR addendum recommending NFA at all dam sites, except Possum Dam, was submitted on May 19, 1997. An additional sample was collected at the Possum Dam site in December 1997. A CAR addendum recommending NFA at Possum Dam was submitted in February 1998.				
103rd Street Pipeline	Intersection of 103rd and Ave. A	Type JP-5 Jet fuel	A "pinhole" leak in the 8-inch pipeline conveying fuel from NAS Jacksonville to NAS Cecil Field was discovered and repaired in the Spring of 1997.	Following discovery of the release, an IRA was performed to remove petroleum impacted soils and to repair the pipeline. The pipeline was then taken out of service. In the spring of 1998, a site assessment was initiated.
Current Investigative Status: Investigation activities were conducted from September to December 1998 to delineate free product and a Site Assessment Report was submitted in February 1999. A remedial action plan was submitted in August 1999 recommending AS/SVE to address soil and groundwater plumes. The installation of the AS/SVE system was completed in the third quarter of FY 2000 and the system began operation in June 2000.				

TABLE 3-2

SITE DESCRIPTION CHART
PETROLEUM PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site Name	Site Location	Waste Type	Sources	Description of Activity
JP-5 Spill Area	Adjacent to Tank 76-E, northeast corner of NFF	JP-5 Jet Fuel	February 10, 1991 JP-5 fuel spill	On February 10, 1991, JP-5 fuel overflowed from Tank 76-E. The fuel flowed down the slope on the east side of the earth-mounded tank into a small ditch that discharges into Sal Taylor Creek.
Current Investigative Status: A preliminary CA was conducted in 1991 and a CA was conducted from May 27 through June 5, 1992. The investigation included soil borings and monitoring well installation and the CAR was submitted in July 1994. Based on FDEP comments on the CAR, further investigations were conducted in 1995. A CARA, submitted in March 1996, was approved by FDEP in May 1996. Recommendations for remedial actions were included in the remedial action plan for the NFF site. Supplemental samples were collected in September 1997, and a CAR letter report was submitted in November 1997. Other Information: From September 1995 through January 1996, an IRA was conducted by Bechtel. The IRA included removal of about 2,750 cubic yards of contaminated soil (>1000 ppm) from the site. Additional soil removal activities were performed in July and August 1999.				
South Fuel Farm	Facility 43, south of intersection of 2nd street and "A" Avenue	JP-5 Jet Fuel	Several tanks that were removed in the 1990s.	Location of several ASTs, USTs, and EMTs. All ASTs were removed in 1995 and all USTs and EMTs (except Tank 342-DT) were removed in July 1994.
Current Investigative Status: CA was completed in December 1991 and CAR was submitted in July 1992. Upon review of CAR, FDEP requested additional investigation at this site. Supplemental investigation was completed in July 1995 and CARA was submitted in January 1996. The CARA was approved in April 1996. A remedial action plan addendum submitted on October 28, 1996 was approved by FDEP in February 1997. The remedial system (biosparging) was installed in February 1998 and system start-up activities were completed in March 1998. The remedial system is in operation.				
Truck Stand Site	Loop road south of NFF	JP-5 Jet Fuel	Used as loading station for the flightline refueling tank trucks. The site consists of a control building, a pumping station, asphalt and concrete parking area, and a retention pond.	Probable spills and soil staining
Current Investigative Status: A preliminary CA was conducted in 1990. A CA was completed in 1991 and CAR was submitted in May 1992. Subsequently, CARA was submitted in July 1994. Upon review of CARA, FDEP recommended additional investigation that included monitoring well installation, collection of groundwater samples, and advancement of soil borings. CARA was submitted to FDEP in March 1996. The CARA II was approved by FDEP in April 1996. The monitoring only plan, submitted on December 6, 1996, was approved in February 1997. The 1st, 2nd, 3rd, and 4th quarter sampling events were completed. A letter report presenting the sampling results for the 1st, 2nd, and 3rd quarter sampling was submitted. The annual monitoring report was submitted in June 1998. Monitoring activities have been changed to semi-annual events. The first semi-annual event was conducted and associated report was submitted in October 1998. Additional contaminated soil was removed in August 2000. Sampling event was performed in March 2000. The September 2000 semiannual groundwater sampling event was postponed because several monitoring wells were destroyed during the source removal activities Other Information: An IRA to remove soils saturated with free product was completed in May 1996. Approximately 1,000 cubic yards of soil were excavated. A RA report was submitted in June 1996.				

TABLE 3-2

SITE DESCRIPTION CHART
PETROLEUM PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site Name	Site Location	Waste Type	Sources	Description of Activity
Sal Taylor Creek Bank Sites	Along Sal Taylor Creek	JP-5 Jet Fuel	February 1991 JP-5 fuel spill	Activities were conducted after the fuel spill.
Current Investigative Status: Nine locations along the banks of Sal Taylor Creek were investigated to determine extent of soil and groundwater contamination due to the 1991 fuel spill. Results of the 1992-93 investigation were presented in the July 1994 CAR. Per FDEP recommendations, additional investigations were completed in September 1995. The CARA submitted in March 1996 was approved by FDEP in April 1996. The CARA recommended natural biodegradation for the remedial action at these sites. Temporary wells were installed in December 1996 at the two locations recommended by FDEP. Groundwater samples were collected from these wells in January 1997. A CARA presenting the groundwater sampling results from the temporary wells, along with a recommendation for NFA, was submitted on June 16, 1997. The NFA recommendation was approved by FDEP.				
Day Tank 1	Northeast of Jet Road	JP-5 Jet Fuel	200,000-gallon interior-lined asphalt-coated steel tank containing JP-5. Tank was installed in 1956.	Location of fuel spill in 1981; approximately 497,000 gallons of JP-5 fuel were spilled due to overfill; approximately 250,000 gallons were recovered.
Current Investigative Status: Geraghty and Miller conducted a preliminary CA in 1981. CA was initiated by ABB-ES in December 1990. The CA was completed in 1993 and a CAR addendum was submitted to FDEP in December 1993. A remedial action plan was submitted to FDEP in May 1994. The remedial action plan was not approved by FDEP. Consequently, an APR was submitted to FDEP in August 1995 to recover free product. The APR was approved in September 1995. Per FDEP recommendation, five additional wells were installed and sampled in September 1995. The remedial action plan was submitted in January 1997. During the June 3, 1997 BCT meeting, the partnering team requested a letter memorandum presenting a phased approach for the remedial action. The letter memorandum was submitted in July 1997. Natural attenuation sampling took place during the second quarter of FY 1999. Natural attenuation sampling will be discontinued. Day Tank 1 was removed in December 1999 and the excavation of the soil mound occurred in December 1999 and January 2000. Semi-annual contaminant monitoring only is ongoing. Groundwater was sampled in July 2000 and the next scheduled sampling event is in January 2001.				
North Fuel Farm Area	Northeast corner of A Avenue and Loop road	JP-5 Fuel	Six 595,000-gallon, interior-lined, asphalt-coated, steel, earth-mounded tanks (76, 76A through 76E). Tanks 76 and 76A were installed in 1952 and remaining tanks were installed in 1954. In 1987, all tanks were relined and overfill protection was installed. In addition, tank 76 was equipped with automatic shut-off system. Tank 76E was taken out of service in 1991.	22,772-gallon spill on August 3, 1987; 913,000-gallon spill on February 10, 1991; and 1,800-gallon spill on November 28, 1993
Initial Remedial Action: Completed installation of a catalytic oxidizer at the NFF site. Also installed 15 extraction wells. Nine of these extraction wells were connected to the bioslurper unit. Quarterly groundwater sampling was completed during this reporting period. Continued free-product recovery activities. The bioslurper system was shut down in April 1998, but the groundwater sumps are being operated. Current Investigative Status: CA was completed in 1991. The CAR was submitted in June 1992. Supplemental investigation was completed in 1993/94. Field work was conducted in April 1994 to investigate the 1,800-gallon spill. In July 1994, FDEP recommended additional investigation that was completed in 1995. CARA was submitted in April 1996. Subsequently, the CARA was approved by FDEP. Supplemental assessment recommended by the BCT was completed in November 1996. The remedial action plan and the revised CAR addendum were submitted in January 1997. FDEP comments for the NFF remedial action plan were reviewed at the June 1997 BCT meeting. Supplemental soil samples were collected in September 1997 and the results were presented in a remedial action plan letter memorandum submitted in November 1997. Additional soil samples for Kerosene Analytical Group parameters were collected in April 1998. The BCT recommended that a pilot study be conducted to evaluate recirculation wells as a viable alternative for groundwater treatment. The 1999 recirculation well pilot-scale study showed difficulties in operation of the system. The technology was eliminated in favor of air sparging. A remedial action plan addendum was submitted in August 1999. This addendum also describes the removal of the tanks, earth mound, and soil beneath the tanks. Natural attenuation sampling took place during the second quarter of FY 1999. Natural attenuation sampling will be discontinued. Semi-annual contaminant monitoring only has been conducted through July 2000. This monitoring has been suspended until the source removal action has been completed. The source removal remedial actions began in the third quarter of FY 2000 and will continue until approximately mid-February 2001.				

TABLE 3-2

SITE DESCRIPTION CHART
PETROLEUM PROGRAM
NAS CECIL FIELD, JACKSONVILLE, FLORIDA

Site Name	Site Location	Waste Type	Sources	Description of Activity
Tank 199	Building 199, Southeast corner of C Avenue and 6th Street	Heating oil	2,000-gallon underground heating oil tank	Leaking UST
Current Investigative Status: A CA plan was prepared in August 1996. The CA was initiated in September 1996 and the field program was completed in December 1996. The field program included soil borings, well installation, groundwater sampling, aquifer testing, and elevation survey. The CAR was submitted in March 1997. Additional soil samples were collected in September 1997, and the results were presented in a CAR memorandum submitted in November 1997. Soil samples for Kerosene Analytical Group analysis were collected in March 1998. Soil removal activities took place during the first quarter of FY 1999. Natural attenuation monitoring began in July 1999 on a semi-annual basis and was changed to annual after the February 2000 event.				
Day Tank 2	Facility 342-DT, south of intersection of 2nd street and "A" Avenue	JP-5 fuel	200,000-gallon earth mounded, interior-lined, asphalt-coated, steel tank.	Several USTs and ASTs were located adjacent to the Day Tank 2 facility. In October 1996, free petroleum product was observed in a piezometer located south of Day Tank 2. The release was believed to have been from the tank or associated piping. Approximately 29,000 gallons of free product were recovered. Day Tank 2 was taken out of operation in October 1996 and removed in 1997.
Initial Remedial Action: Day Tank 2 was decommissioned in 1996 and was removed in August 1997 Current Investigative Status: A CA plan was submitted in June 1997. The field investigation at Day Tank 2 that included installation of several monitoring wells, DPT groundwater screening points, soil borings, and soil sampling in March 1998. SAR was completed in July 1998. A source removal plan was submitted in October 1998 and the remedial action was conducted in November 1998. Monitoring wells that were destroyed during the IRA were replaced and sampled in April 1999. A report describing the analytical results was completed in May 1999. Groundwater contamination will be addressed during the OU 9, Sites 36/37 RI/FS (see Table 3-1).				
Tank 46 (Includes 46R, 46D, 46SUL, and 46UL)	Building 46 across D Avenue from the Bachelor Officers Quarters	Regular and unleaded gasoline and diesel fuel	A total of eight tanks: - four 2,000-gallon tanks - two 10,000-gallon tanks - two 6,000-gallon tanks	Leaking USTs
Current Investigative Status: A remedial action plan was submitted in March 1999. This remedial action plan included the design of an AS/SVE System for the remediation of contaminated soil and groundwater. The remedial action plan was revised to use a nutrient-enhanced biosparging system to remediate the source area and plume in June 2000. Installation of the remediation system will be completed in January 2001.				
Tank 9L1 and 9L2	Building 9 near the corner of B Avenue and 3rd Street	Gasoline	Two tanks, each 1,250 gallons each	Leaking USTs
Current Investigative Status: A remedial action plan was submitted in February 1999. This remedial action plan included the design of an AS/SVE System for the remediation of contaminated soil and groundwater. The remedial action plan was revised to use a nutrient-enhanced biosparging system to remediate the source area and plume in June 2000. Installation of the remediation system will be completed in January 2001.				

4.0 UPCOMING QUARTER SITE ACTIVITIES

4.1 COMMUNITY RELATIONS

The following agenda items are scheduled for the January 16, 2001 RAB meeting:

- Update on the status of each of the sites at NAS Cecil Field.
- Update on the installation of the remediation systems at Buildings 9 and 46.
- Update on the status of the Findings of Suitability to Transfer.
- Update on the status of the former railroad track site investigations.
- Presentation on the Site 36/37 AS design.

Additionally, the following community relations activities will be conducted during the second quarter of FY 2001:

- Continue implementation of the Community Relations Plan.
- Support the NAS Cecil Field RAB.
- Conduct public meetings as needed.
- Prepare and distribute fact sheets as needed.

4.2 FIELD WORK

The following field activities are planned for the second quarter of FY 2001:

IR Program

- Site 3 natural attenuation groundwater sampling – 2nd Quarter (Year 3).
- Site 3 air sampling and operation and maintenance of AS system.
- Site 5 natural attenuation groundwater sampling – 2nd Semi-Annual (Annual Year 3).
- Site 7 groundwater sampling – 2nd Quarter (Year 4).
- Site 8 natural attenuation groundwater sampling – 2nd Semi-Annual (Annual Year 3).
- Site 11 natural attenuation groundwater sampling – 1st Semi-Annual (Year 3).
- Site 16 natural attenuation groundwater sampling – 3rd Quarter (Year 3).
- Site 16 air sampling and operation and maintenance of AS/SVE system.
- Site 17 natural attenuation groundwater sampling – 2nd Semi-Annual (Annual Year 4).
- Site 36/37 natural attenuation groundwater sampling – 1st Quarter (Year 1).

- Site 37 soil excavation.
- Soil excavation for PSCs 21, 25, 39, and 42 and Building 98.

Petroleum Program

- Completion of the excavation of soil and demolition of tanks at the NFF.
- Completion of installation of remediation systems at Buildings 9 and 46 and start up the systems.
- Tank 199 groundwater sampling.
- Jet Engine Test Cell groundwater sampling and excavation of contaminated soil.
- Day Tank 1 groundwater sampling.
- Ocala Crash site groundwater sampling.
- Tank 623 groundwater sampling.
- Install monitoring wells and collect groundwater samples at Tanks 367, 404, 428, and 502.
- UST, AST, and contaminated soil removal.

BRAC Program

- Sampling at Buildings 610, 635, and 824A and the Former Fuel Depot.
- Soil excavation at Buildings 98, 535, and 635 and the Former Fuel Depot.

4.3 DELIVERABLES

The following deliverables are scheduled for the second quarter of FY 2000.

IR Program

- Sites 1 and 2 draft Operating Properly and Successfully Demonstration Report.
- Site 3 Natural Attenuation Groundwater Monitoring Report – 2nd Quarter (Year 2).
- Site 3 Interim Remedial Action Report.
- Site 3 Quarterly AS Operation and Maintenance Report.
- Site 5 draft Natural Attenuation Groundwater Sampling – 2nd Semi-Annual (Annual Year 3).
- Site 7 Groundwater Sampling – 2nd Quarter (Year 4).
- Site 8 draft Natural Attenuation Groundwater Sampling – 2nd Semi-Annual (Annual Year 3).
- Site 11 Natural Attenuation Groundwater Sampling – 1st Semi-Annual (Year 3).
- Site 16 Natural Attenuation Groundwater Sampling – 3rd Quarter (Year 3).
- Site 16 Interim Remedial Action Report.
- Site 16 Quarterly AS/AVE Operation and Maintenance Report.
- Site 17 draft Natural Attenuation Groundwater Sampling – 2nd Semi-Annual (Annual Year 4).

- Site 36/37 Final ROD.
- Site 36/37 draft AS design.
- Site 36/37 final Long-Term Monitoring Plan.
- Sites 21, 25, and 45 draft RI.
- Sites 21, 25, and 45 draft FS.
- Final SMP for Fiscal Year 2001 and SMP First Quarter Update.
- Action Memoranda for PSC 21, 25, 39, 42, and 51.
- Technical Memoranda for NFA for PSCs 30, 32, 40, 43, 44, 46, 47, 50, 52, and 56.

Petroleum Program

- Tank 199 Groundwater Sampling Report.
- NFF Source Removal Report.
- Day Tank 1 Groundwater Monitoring Report.
- Tank 623 Groundwater Monitoring Report.
- SAR for the North-South Apron Plume.
- Ocala Crash Site Semi-Annual Groundwater Monitoring Report.
- Building 80 Semi-Annual Groundwater Monitoring Report.
- Building 312 SAR.

BRAC Program

- Technical Memorandum for the Old Golf Course.
- Construction Completion Reports for gray site excavations.
- Work plans for gray site excavations.
- Continue to issue Sampling and Analysis Outlines (SAOs) and SARs for BRAC sites.

4.4 MEETINGS

The following meetings are tentatively scheduled for the next quarter:

- Remedial project manager and partnering meetings tentatively planned for each month.
- Petroleum Subcommittee meeting.
- RAB meeting (one per quarter).
- Document review meetings.
- Field program scoping meetings.

- Data evaluation meetings.
- Tier I/II partnering meetings.